



23490 Connecticut Street  
Hayward, California 94545  
510.773-9137-510-782-8584 Fax  
Jason Gulbransen  
Project Manager

January 26, 2005

Mr. Todd Miller  
Malcolm Pirnie, Inc.  
2000 Powell Street, Suite 1180  
Emeryville, CA 94608

**RE: System Operation Status Report  
4<sup>th</sup> Quarter October, November, December 2004  
Jefferson Car Wash Site  
Groundwater Extraction and Treatment System  
3080 Jefferson Street, Napa, California**

Dear Mr. Miller;

DECON Environmental Services, Inc. (DECON) has prepared this Status Report to document the quarterly activities at the above referenced site. The Jefferson Car Wash groundwater extraction and treatment system operates by pumping groundwater from two-extraction wells (EW-2, EW-3). The water is conveyed to the treatment compound where the water extracted from each well combines into one pipe and flows through a 10 micron bag filter. The raw water then flows through two granular activated carbon (GAC) units. The treated water then proceeds through a flow totalizer/meter and is discharged into the Napa Sanitary sewer system. The treatment system contains a piping manifold that allows the three carbon units to be utilized in any lead-lag configuration. Currently GAC vessel #1 is the lead and GAC vessel #2 is the lag. No change to the configuration occurred this quarter.

The purpose of this treatment system is to remove TPH-gasoline and MTBE contaminants from the groundwater. Monthly groundwater sample analyses indicate the system is meeting its intended purpose. The monthly sample analysis indicates the presence of TPH-gasoline and MTBE in the raw water from each extraction well. Analytical results from the treated effluent are consistently non-detect for these compounds.

The attached table summarizes the analytical results for each month at each sample location. There are five sample locations: (1) EW-2, (2) EW-3, (3) Combined Influent, (4) Lag GAC Vessel Inlet, (5) Effluent/Discharge point.

### **October 2004 Site Visit**

The groundwater sampled from each well was clear and sediment free. When the sump pump would turn on, the pressure gauge before the bag filter indicated a pumping pressure above 25 psi, indicating some backpressure on the piping. The filter bag was changed and the pressure gauges before and after the bag filter returned to normal. Once the bag was changed and the sump pump turned on, the pressure before the filter bag was below 10 psi. The flow rates at each wellhead were appropriate, EW-2 ~3.5 gpm, EW-3 ~5 gpm.

The approximate contaminant mass removed is as follows:

24.86 grams of TPH-gasoline was removed from 162,700 gallons of treated water.

12.66 grams of MTBE was removed from 162,700 gallons of treated water.

### **November 2004 Site Visit**

The groundwater sampled from each well was clear and sediment free. The pressure gauges before and after the bag filter were the same (<1 psi), indicating no sediment loading on the filter. The flow rates at each wellhead were appropriate, EW-2 ~3.5 gpm, EW-3 ~5 gpm.

Two system modifications occurred on this 12-02-04 site visit: 1) Installation of a shade structure over the LCP, and 2) installation of an up-hill loop in the discharge piping after the flow meter.

The approximate contaminant mass removed is as follows:

23.12 grams of TPH-gasoline was removed from 188,550 gallons of treated water.

10.36 grams of MTBE was removed from 188,550 gallons of treated water.

### **December 2004 Site Visit**

The groundwater sampled from each well was clear and sediment free. This month, sampling event followed a period of very heavy rains. During the two days prior to this site visit, The Treatment System auto-dialer notified me of high-pressure readings at the bag filter. The filter bag was changed, and with only flow from the two wells the pressure gauges before and after the bag filter were the same (<1 psi). With the sump pump turned on the pressure gauge before the filter bag was normal, < 10 psi. The flow rates at each wellhead were appropriate, EW-2 ~3.5 gpm, EW-3 ~5 gpm.

**December Site Visit Cont.**

The approximate contaminant mass removed is as follows:

67.94 grams of TPH-gasoline was removed from 304,000 gallons of treated water.

10.57 grams of MTBE was removed from 304,000 gallons of treated water.

**System Observations/Recommendations**

The analytical results have indicated MTBE break-thru on the lead vessel (GAC-1). The November results show 1.1 ug/L, and the December results show 1.9 ug/L of MTBE at the inlet to the lag vessel (GAC-2). Once the aggregate amount of TPH-g and MTBE is above 5 ug/L the GAC vessel configuration will be changed.

The roto-meters in each well vault are clouded with algae or organic matter. DECON plans to clean both during the January 2005 site visit.

A total of 655,250 gallons of groundwater were treated during the 4<sup>th</sup> quarter of 2004. A total of 67.94 grams of TPH-gas was removed, and a total of 10.57 grams of MTBE was removed for this quarter.

Please feel free to contact me with any questions regarding this project.

Sincerely,  
DECON Environmental Services, Inc.

*Jason Gulbransen*

Jason Gulbransen  
Project Manager

**Fourth Quarter October, November, December 2004  
Summary of Analytical Results  
Jefferson Car Wash  
Groundwater Treatment System**

<b>Oct-04</b>		<b>EW-2</b>	<b>EW-3</b>	<b>Combined</b>	<b>Lag V</b>	<b>Discharge</b>
<b>Sample Date 11-10-04</b>				<b>Inlet</b>	<b>Inlet</b>	
TPH-g	ug/l	47	39	33	<25	<25
BTEX	ug/l	<1	<1	<1	<1	<1
MTBE	ug/l	67	11	29	BDL	BDL
TPH-d	ug/l	N/A	<50	N/A	N/A	<50
Total Lead	mg/l	N/A	<0.015	N/A	N/A	<0.015
Total Flow	gallons	230,720	1,281,780	N/A	N/A	1398800*

**BDL: Below Detection Limits**

**N/A: Not Analyzed or Not Applicable**

<b>Nov-04</b>		<b>EW-2</b>	<b>EW-3</b>	<b>Combined</b>	<b>Lag V</b>	<b>Discharge</b>
<b>Sample Date 12-02-04</b>				<b>Inlet</b>	<b>Inlet</b>	
TPH-g	ug/l	49	29	29	<25	<25
BTEX	ug/l	BDL	BDL	BDL	BDL	<1
MTBE	ug/l	43	8.7	30	1.1	<1
TPH-d	ug/l	N/A	N/A	N/A	N/A	<50
Total Lead	mg/l	N/A	N/A	N/A	N/A	<0.015
Total Flow	gallons	262,690	1,438,360	N/A	N/A	1569600*

**BDL: Below Detection Limits**

**N/A: Not Analyzed or Not Applicable**

<b>Dec-04</b>		<b>EW-2</b>	<b>EW-3</b>	<b>Combined</b>	<b>Lag V</b>	<b>Discharge</b>
<b>Sample Date 01-03-04</b>				<b>Inlet</b>	<b>Inlet</b>	
TPH-g	ug/l	38	64	48	<25	<25
BTEX	ug/l	BDL	BDL	BDL	<1	<1
MTBE	ug/l	5.8	10	9.4	1.9	<1
TPH-d	ug/l	NR	NR	NR	NR	<50
Total Lead	mg/l	NR	NR	NR	NR	<0.015
Total Flow	gallons	334,250	1,670,360	N/A	N/A	1850700*

**BDL: Below Detection Limits**

**NR: Not Required**

**\* These Flow Totals Are From The Discharge Flow Totlaizer**

**Jefferson Carwash Mass Contaminant Removal Spreadsheet**

<b>Oct-04</b>		<b>EW-2</b>	<b>EW-3</b>	<b>Combined Inlet</b>	<b>Lag V Inlet</b>	<b>Discharge</b>	<b>Total Mass</b>
TPH-g	ug/l	47	39	33	<25	<25	
MTBE	ug/l	67	11	29	BDL	BDL	
Total Flow	gallons liters (3.78533)	27,770 105,119	134,930 510,755	N/A	N/A	162700* #VALUE!	
<b>Mass</b>							
TPH-g	grams	4.94	19.92				<b>24.86</b>
MTBE	grams	7.04	5.62				<b>12.66</b>

<b>Nov-04</b>		<b>EW-2</b>	<b>EW-3</b>	<b>Combined Inlet</b>	<b>Lag V Inlet</b>	<b>Discharge</b>	<b>Total Mass</b>
TPH-g	ug/l	49	29	29	<25	<25	
MTBE	ug/l	43	8.7	30	1.1	BDL	
Total Flow	gallons liters (3.78533)	31,970 121,017	156,580 592,707	N/A	N/A	188550* #VALUE!	
<b>Mass</b>							
TPH-g	grams	5.93	17.19				<b>23.12</b>
MTBE	grams	5.20	5.16				<b>10.36</b>

<b>Dec-04</b>		<b>EW-2</b>	<b>EW-3</b>	<b>Combined Inlet</b>	<b>Lag V Inlet</b>	<b>Discharge</b>	<b>Total Mass</b>
TPH-g	ug/l	38	64	48	<25	<25	
MTBE	ug/l	5.8	10	9.4	1.9	BDL	
Total Flow	gallons liters (3.78533)	81,560 308,732	232,000 878,197	N/A	N/A	304000* #VALUE!	
<b>Mass</b>							
TPH-g	grams	11.73	56.20				<b>67.94</b>
MTBE	grams	1.79	8.78				<b>10.57</b>

<b>Total TPH-g Mass Removed for 4th Quarter</b>	<b>115.92 g</b>
<b>Total MTBE Mass Removed for 4th Quarter</b>	<b>33.59 g</b>

\* Discharge Flow Total From EW-2 & EW-3 Readings